The usual tables follow.

TABLE I.—*Flood stages in the West Gulf Drainage during month of Sept., 1919.*

River and station.	Flood stage.	Above flood stages—dates.		Crest.	
		From—	To—	Stage.	Date.
Colorado:	*Feet.*			*Feet.*	
Austin, Tex.	18	25	25	19.5	24–25
Columbus, Tex.	28	25	28	32.8	27
Guadalupe:					
Gonzales, Tex.	22	19	21	24.0	20
Do	22	25	28	27.1	26
Victoria, Tex.	16	21	24	20.2	23
Do	16	27	(1)	22.0	30
Rio Grande:					
Eagle Pass, Tex.	16	17	18	38.5	17
Do	16	22	24	32.6	23
Laredo, Tex.	27	18	19	33.0	19
Do	27	24	25	30.6	25
Rio Grande City, Tex.	15	16	28	26.2	26
Mission, Tex.	24	21	30	27.6	27

[1] Continued into October.

TABLE II.—*Flood stages in the Mississippi Drainage during month of Sept., 1919.*

River and station.	Flood stage.	Above flood stages—dates.		Crest.	
		From—	To—	Stage.	Date.
Solomon:	*Feet.*			*Feet.*	
Beloit, Kans.	18	20	23	33.6	20
Republican:					
Clyde, Kans.	17	.....	.....	17.4	20

RIVER GAGINGS ON TANANA RIVER AT NENANA, ALASKA.

SUMMARIZED BY ALFRED J. HENRY, METEOROLOGIST.

The Alaska Engineering Commission (Government Railroad Engineers) has established a river gage at Nenana, Alaska, about half a mile above the confluence of the Nenana River and has been making daily gagings since June, 1916, except when the river was frozen. The elevation of the zero of the gage has been fixed by Mr. Frederick D. Browne, engineer in charge of the Nenana district, at 335 feet above mean lower low water at Portage Bay in Prince William Sound. The gage graduations extend from −1 to 15 feet. Through the courtesy of Mr. Browne the Weather Bureau has been furnished with a copy of the daily gagings for the seasons 1916, 1917, 1918 and up to August of 1919. These have been summarized and the means and extremes appear in the table below.

The Tanana River, it may be remembered, flows from lower to higher latitudes and consequently the ice breaks up first on the headwaters. The river freezes over about the last week in October and water appears on the ice in spring at Nenana in the last half of April, the break-up coming a little later. The total range from extreme low to extreme high water during the period of observations was 18.1 feet and both highest and lowest water were due to ice conditions. The lowest water was −0.6 on November 1, 1916, and the river froze on that date. There does not appear to be a pronounced snow flood in the spring as the ice breaks up. The river is highest on the average of 4 seasons in July and gradually declines until freezing sets in in the autumn. The daily variations are small, rarely as much as 2 feet. The absence of heavy summer rains and a small run-off from such precipitation as occurs during the open season seems to indicate that the flood menace, if any, must be confined to the breaking up of the ice in spring.

Monthly means and extremes of river gagings on Tanana River, at Nenana, Alaska.[1]

[Monthly means = feet and tenths.]

Year.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
1916	.....	9.3	9.4	7.9	5.8	4.3	.....
1917	5.6	7.5	11.3	9.3	6.3	2.1	.....
1918	9.9	11.9	10.6	9.3	6.5	3.1	.....
1919	5.8	7.9	10.6	9.5	.....	.....	.....
Means	7.1	9.1	10.5	9.0	6.2	3.2	.....
HIGHEST.							
1916	.....	10.9	10.6	10.0	7.3	8.5	.....
1917	9.3	9.2	14.1	11.5	10.9	3.2	.....
1918	17.5	16.0	11.7	11.1	8.4	4.4	.....
1919	7.8	10.5	12.0	11.1	.....	.....	.....
LOWEST.							
1916	.....	6.9	8.3	5.6	3.7	0.1	−0.6
1917	2.6	5.7	8.8	7.0	3.4	0 2	.....
1918	3.7	9.9	9.3	7.0	4.2	−0.4	.....
1919	.....	.....	.....	.....	.....	.....	.....

[1] Zero of gage 335 feet above mean lower low water at Portage Bay, Prince William Sound.

MEAN LAKE LEVELS DURING SEPTEMBER, 1919.

By UNITED STATES LAKE SURVEY.

[Dated: Detroit, Mich., Oct. 6, 1919.]

The following data are reported in the "Notice to Mariners" of the above date:

Data.	Lakes.[1]			
	Superior.	Michigan and Huron.	Erie.	Ontario.
	Feet.	*Feet.*	*Feet.*	*Feet.*
Mean level during Sept., 1919:				
Above mean sea level at New York	602.55	580.81	572.75	246.86
Above and below—				
Mean stage of Aug., 1919	−0.04	−0.33	−0.39	−0.4
Mean stage of Sept., 1918	+0.04	+0.31	+0.28	+0.66
Average stage for Sept., last 10 years	−0.08	+0.14	+0.38	+0.73
Highest recorded September stage	−1.53	−2.62	−1.19	−0.75
Lowest recorded September stage	+1.06	+1.15	+1.47	+2.86
Average relation of the September level to—				
August level	.....	−0.2	−0.2	−0.4
October level	.....	+0.2	+0.3	+0.4

[1] Lake St. Clair's level: In September, 575.61 feet.